



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,624	07/21/2003	Edward J. McGunn	00272P0014US	5179

32116 7590 10/02/2006

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
500 W. MADISON STREET  
SUITE 3800  
CHICAGO, IL 60661

EXAMINER

SHAPIRO, JEFFERY A

ART UNIT	PAPER NUMBER
----------	--------------

3653

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/623,624	MCGUNN ET AL.	
	Examiner	Art Unit	
	Jeffrey A. Shapiro	3653	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-9, 11-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jo et al (US 2003/0141265 A1) in view of Mignault (US 6,269,285 B1).

**Regarding Claims 1, 3, 7 and 8,** Jo et al discloses a shelf-like device with multiple rows having a pusher plate (11) that contacts the rear most articles (13), base rail (12), stop plate (14) that abuts the front-most articles, rails (15) and end supports (22 and 23). Note that pusher plate (11) is biased by spring (20). See figures 1-7 and paragraphs (2 and 18-20). Note that the "means for withdrawing tubes of currency" is construed as being performed by a customer, as these limitations are given their broadest reasonable interpretation. See Jo, paragraph (4).

**Regarding Claims 1, 2, 7 and 16** note that it would have been obvious to use a drawer with four walls instead of just the shelf of Jo, since both configurations are considered to be functionally equivalent to each other and would therefore be obvious substitutions of each other.

**Regarding Claims 1, 4, 6, 9, 11 and 17,** Jo does not expressly disclose, but Mignault discloses a sensor (84, 86, 88, 90, 92, 94, 96 and 98) used with a pusher plate

Art Unit: 3653

(82) to determine the quantity of items (7, 72, 74, 76 or 78) in a row (34, 36, 38 or 40) by sensing the position of the pusher plate. See figures 2 and 3. This sensor data is sent to a controller (134) and an inventory control center (136). See Mignault, col. 6, lines 30-47. The inventory information is construed as including a quantity of items and their dollar value. **Regarding Claims 12 and 18**, note that Mignault discloses that a computer obtains the inventory information from the controller. It would have been obvious for such a computer to have a display that would display inventory information such as quantity and value of items in the form of "vertical tubes of currency" by row as this is a logical way of presenting such information. **Regarding Claims 13-16 and 20**, note that Mignault further discloses a magnetic reed switch (86) used for sensing the position of the pusher plate. This reed switch is considered to be part of a system of resistors having voltages and impedances throughout.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used the sensor system of Mignault in the pusher plate system of Jo.

The suggestion/motivation would have been to determine the quantity of items left in a column of Jo's shelf device.

3. Claims 5, 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jo et al (US 2003/0141265 A1) in view of Mignault (US 6,269,285 B1) and further in view of O'Brien et al (US 6,415,953 B1). **Regarding Claims 5, 10 and 19**, Jo discloses the system described above. Jo does not expressly disclose, but O'Brien discloses a withdrawing means (44) having a semi-cylindrical housing for receiving a vertical cylindrical item in the form of bottles. See figures 3 and 4 and col. 3, lines 9-52.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have placed the semi-cylindrical withdrawing means of Mignault at the front of a column in the pusher plate system of Jo.

The suggestion/motivation would have been to withdraw a single cylindrical item from a column while maintaining the other items in the column. This teaching is readily apparent from figures 3 and 4 and col. 3, lines 9-52.

### ***Response to Arguments***

4. Applicant's arguments filed 6/23/03 have been fully considered but they are not persuasive. Applicant asserts that Claim 1, and apparently Claims 7 and 16 "specifies a coin dispensing system". Note that these limitations are found in the preamble and do not carry patentable weight. Nonetheless, regardless of the item, Jo, Mignault and O'Brien read on Applicant's broadly written claims. Jo discloses a shelf that has rows for dispensing items. It would have been obvious to use a drawer in place of the shelf. Such a drawer has a handle or other means for withdrawing the draw from its closed position. Applicant asserts that Jo does not disclose or teach a "means for withdrawing tubes of currency from the drawer."

However, Jo's shelf disposed as a functionally equivalent drawer would in fact have a "means for withdrawal" inasmuch as Applicant's cylinder (44) is a means for withdrawal. Applicant's cylinder has an open half that accepts a front-most tube of coins. In order to withdraw the coins, a person must rotate the cylinder 180 degrees in order to present the front-most tube to manual removal while at the same time segregating this tube from the rest. Jo's drawer handle would cause the drawer to be

Art Unit: 3653

opened to a position where a person can easily withdraw the front-most tube or cylindrical item. Therefore, it can be construed that it would have been obvious to one ordinarily skilled in the art to have a means for withdrawal on Jo's apparatus, within the broadest reasonable interpretation of Applicant's "means for withdrawal" limitation.

In an alternative interpretation, Jo discloses a front plate (14) and a rear plate (11). The front plate can be construed as a pusher plate because it can be construed to place a reaction force in opposition to the force of the items and plate (11). Rail (22) can be construed as the biasing means since it biases the plate to remain stationary and upright. The rear pusher plate can be construed as a withdrawal means, because plate (11) can be construed to push the rear-most cylinders forward into a position that they might best be withdrawn by a human, again, in the spirit of Applicant's cylinder (44).

Although Mignault incorporates a vertical pusher plate, the quantity sensors still work the same whether in a horizontal or vertical position. Mignault teaches keeping track of items by the item sensors, and recording such information in a computer database. Again, see figure 6 of Mignault. Although Mignault concerns an ice cream freezer, the registration of a single item corresponds with the registration of a single tube of coins. It would have been obvious to correspond a single item sensor signal with a single value of a tube or an item. In fact, if a tube has a known quantity of coins and therefore a known value, the number of tubes would correspond to the number of tubes multiplied by the value of a single tube. Again, this would have been obvious to one of ordinary skill in the art based on commonly known mathematics and the nature of the computer/controller in Mignault's apparatus. In fact, it can be implied by Jo and

Art Unit: 3653

Mignault that the value of the inventory would be important to maintain since it is directly related to profits.

Regarding an impedance network, note that at the very least, Mignault's reed switch network would be considered functionally equivalent to an impedance or resistance network and Applicant does not appear to place any particular reason for using an impedance network versus other functionally equivalent devices.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is (571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

Art Unit: 3653

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JAS

September 26, 2006



PATRICK MACKEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600